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EXAMINER	
SCHWARTZ, DARREN B	

ART UNIT	PAPER NUMBER
2435	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/528,787	KSONTINI ET AL.	
	Examiner	Art Unit	
	DARREN SCHWARTZ	2435	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 April 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant amends claims 1 & 2.

Claims 1-9 are presented for examination.

Response to Arguments

1. In light of the amendments to the claims the rejections under 35 U.S.C. 112, second paragraph are withdrawn.

Applicant's arguments filed 09 April 2009 have been fully considered but they are not persuasive.

2. Applicant argues on page 6 of Remarks, "Perlman and Sasaki fail to teach or fairly suggest 'transmitting a … cryptogram including an identifier belonging to the second device and the unique pairing key,' as required by claim 1."

The Examiner disagrees. Sasaki (U.S. Pat 6351536 B1), hereinafter referred to as Sasaki teaches:

> "A common key is generated in accordance with a common key generation program. For example, a random number generation program is used as the common key generation program, to generate a random number and take the random number as a common key.
>
> The generated common key is registered (stored) in the external storage device 18 in correspondence with an identifier (step 101)" (column 7, lines 8-14).

"The retrieved common key i is enciphered using the first public key i transmitted from the receiver 20 in accordance with a first public key system encryption program (step 105). The enciphered common key (hereinafter referred to as the enciphered common key i), together with the identifier i, is transmitted to the receiver 20 (step 106)" (column 7, lines 54-63).

The excerpts of Sasaki cited correspond with Figure 4, elements 101, 105 and 106.

The Examiner sustains Sasaki and the respective combination.

The fact that the Examiner may not have specifically responded to any particular arguments made by Applicant and Applicant's Representative, should not be construed as indicating Examiner's agreement therewith.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman (U.S. Pat 6975729 B1), hereinafter referred to as Perlman, in view of

Sasaki (U.S. Pat 6351536 B1), hereinafter referred to as Sasaki, in further view of Kustin et al (U.S. Pat 7185196 B1), hereinafter referred to as Kuskin.

Re claim 1: Perlman teaches a pairing control method between a first device [Fig 3, elt 110: FIREWALL] and a second device [Fig 3, elt 104: COMPUTER SYSTEM 104], the pairing control method aiming to secure the data exchange with the aid of a unique pairing key (Fig 3, elts 104 & 110: col 3, lines 1-3 and col 4, lines 39-40), the pairing control method comprising:

- verifying the pairing between the two devices and using the unique pairing key if the pairing between the two devices has been already carried out (col 2, lines 37-47).

However, Sasaki teaches a pairing procedure by transmitting a cryptogram contained in the second device [Fig 1, elt 10; Fig 2, elt 10; Fig 4, elt "TRANSMITTER"], the cryptogram including an identifier [IDENTIFIER i] belonging to the second device [Fig 1, elt 10; Fig 2, elt 10; Fig 4, elt "TRANSMITTER"] and the unique pairing key [COMMON KEY i] (Fig 1, elts 101 & 105; col 7, lines 8-14; col 7, lines 54-63), and the cryptogram being encrypted by a secret key common [FIRST PUBLIC KEY i] to all the first devices [Fig 1, elt 20; Fig 2, elt 20; Fig 4, elt "RECEIVER"] (col 8, lines 27-37),

decrypting the cryptogram with the first device and extracting the identifier of the second device and the unique pairing key from the cryptogram (Fig 4, elts 204 & 205: col 7, line 60 – col 8, line 3).

However, Perlman and Sasaki do not expressly disclose searching for a free location among the locations reserved for the pairing data in the first device and in this

case and storing the unique pairing key in the first device, the unique pairing key used to pair with the second device.

Yet Kustin teaches searching for a free location among the locations reserved for the pairing data in the first device (col 4, lines 33-64) and storing the unique pairing key in the first device, the unique pairing key used to pair with the second device (col 3, lines 15-20; col 5, lines 50-52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Perlman and Sasaki with the teachings of Kuskin, for the purpose of providing key storage while utilizing limited memory and power consumption. It is known in the art that computing resources are limited in some capacity (e.g. memory, processing speed, etc.) and utilizing limited memory efficiently is well known.

Re claim 2: The combination of Perlman, Sasaki and Kuskin teaches the unique pairing key is based on the identifier of the second device and on the data of the first device (Fig 4, elts 101, 102, 103, 201, 202, 203 & 104: col 8, lines 27-60).

Re claim 3: The combination of Perlman, Sasaki and Kuskin teaches the cryptogram is stored in the first device and encrypted with a secret key common to the second devices [Fig 3, elt 306] (Perlman: Fig 3: elts 302, 303, 306, 308, 310; Abstract, lines 11-13).

Re claim 5: The combination of Perlman, Sasaki and Kuskin teaches the pairing is conditioned by the introduction of a secret code transmitted to the first device and

verified by said first device (Perlman: Fig 4B: elts 417, 418, 419, 415 & 422: col 5, line 61 – col 6, line 8).

Re claim 6: The combination of Perlman, Sasaki and Kuskin teaches the secret code belongs to and is unique to each first device (Perlman: Fig 3, elts 302, 303, 308, 310, 302, 314, 328, 329 & 330).

Re claim 7: The combination of Perlman, Sasaki and Kuskin teaches the required secret code is different in each pairing (Perlman: col 1, lines 50-55).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman (U.S. Pat 6975729 B1), hereinafter referred to as Perlman, Sasaki (U.S. Pat 6351536 B1), hereinafter referred to as Sasaki and Kustin et al (U.S. Pat 7185196 B1), hereinafter referred to as Kuskin, in further view of, Marino et al (U.S. Pat 6026165 A), hereinafter referred to as Marino.

Re claim 4: The combination of Perlman, Sasaki and Kustin teaches all the limitations of claim 1 as previously discussed.

However, Marino teaches each location includes an activity counter updated during every positive verification of the pairing based on this location, the search for the location to be replaced being determined by the value of the activity counter (Marino: col 7, lines 42-44, lines 54-56 & lines 64-65; col 8, lines 7-15; col 9, lines 19-27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Perlman, Sasaki and Kustin with

the teachings of Marino, for the purpose of indexing the keys for quick retrieval when utilizing limited memory resources.

5. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman (U.S. Pat 6975729 B1), hereinafter referred to as Perlman, Sasaki (U.S. Pat 6351536 B1), hereinafter referred to as Sasaki and Kustin et al (U.S. Pat 7185196 B1), hereinafter referred to as Kuskin, in further view of Tello (U.S. Pat 6463537 B1), hereinafter referred to as Tello.

Re claim 8: Tello teaches it comprises the steps of: transmitting a unique identifier of the first device and a unique identifier of the second device to a management centre, verifying the conformity of this pairing and calculating by means of the management centre the corresponding secret code on the basis of the two identifiers, transmitting this secret code to the user, initiating the pairing and requesting the introduction of the secret code, by means of the first device, calculating by means of the first device the necessary secret code on the basis of the identifiers of the first and second devices, comparing the calculated code with that which has been introduced by the user, accepting the pairing if the two codes are identical (Fig 1; col 17, line 52 - col 18, line 3; col 18, lines 32-39; col 24, lines 25-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Perlman, Sasaki and Kustin with the teachings of Tello for the purpose of providing a manager for verifying the two devices are allowed to inter-connect. All references are analogous art as they teach

transmission of data from a first device to a second device using device dependant information.

Re claim 9: The combination of Perlman, Sasaki and Kustin and Tello teaches it comprises the steps of determining the new secret code on the basis of the two identifiers and of an index that represents the number of pairings previously carried out, whereas the first device stores this index in its memory (Kustin: Fig 2; col 4, lines 26-64)

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the text of the passage taught by the prior art or disclosed by the examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat 6148404 A, particularly Figure 6

U.S. Pat pub 2003/0026433 A1 relevant to claim 8 subject matter.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DARREN SCHWARTZ whose telephone number is (571)270-3850. The examiner can normally be reached on 7am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571)272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. S./
Examiner, Art Unit 2435
/Kimyen Vu/
Supervisory Patent Examiner, Art Unit 2435